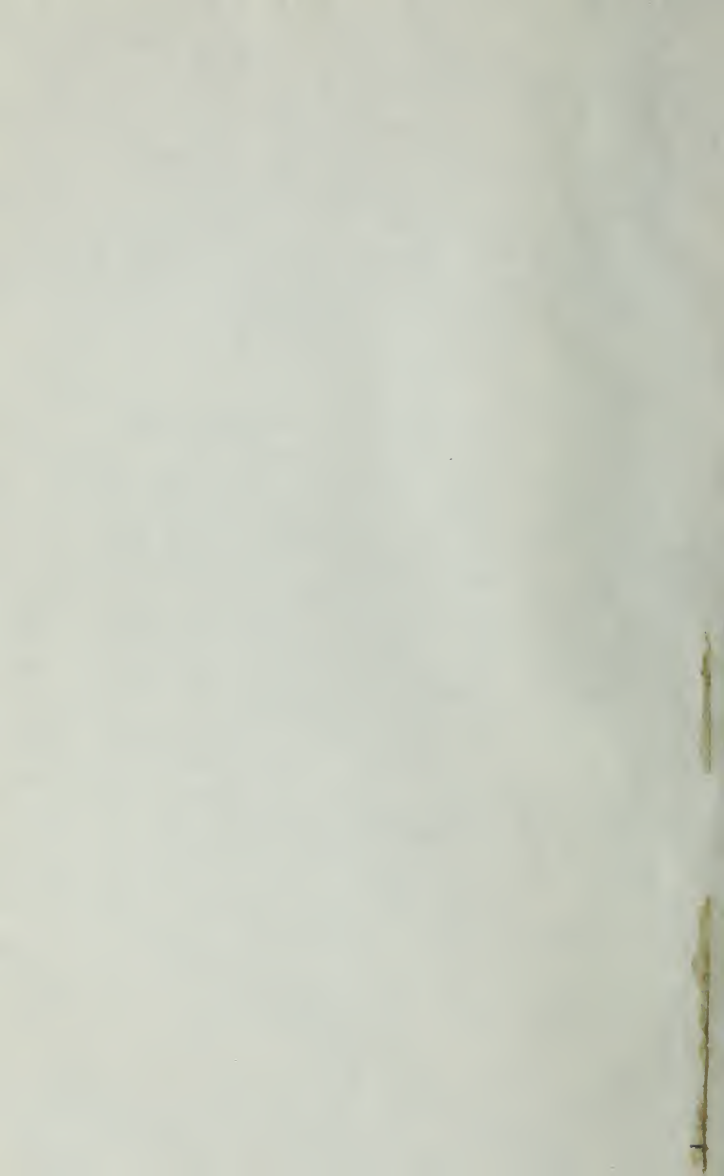


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HOW TO GROW

A POPULAR EXPLANATION OF THE
BEST METHOD OF CULTURE.

BY

WILLIAM EARLEY,

AUTHOR OF WEEKLY CALENDARS ON GARDENING OPERATIONS, "HOW TO GROW
ASPARAGUS," "HIGH-CLASS KITCHEN GARDENING," ETC., ETC.,
AND MEMBER OF "THE FRUIT AND VEGETABLE COMMITTEE" OF THE ROYAL
HORTICULTURAL SOCIETY OF LONDON.



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PREFACE.

VARIOUS papers have from time to time been written on the culture of MUSHROOMS. Few things, however, are more frequently inquired after in the pages of weekly garden literature: either detailed information is sought, or the reason why greater success has not followed the efforts of the cultivator.

The author does not pretend to advance any new or original method of growing this justly esteemed addition to winter culinary products; but as a successful "grower," he wishes to call attention to certain facts necessary to ensure success, and so to simplify their culture, that all who are possessed of a cellar, outhouse, or shed, may grow mushrooms, and prove their culture to be as easy as it is interesting and profitable.

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HOW TO GROW MUSHROOMS.

I.—THE MOST CONVENIENT FORMS OF STRUCTURES IN WHICH TO GROW MUSHROOMS.

It is of the utmost importance, in selecting a situation upon which to form and make mushroom beds, that a moderately warm place, having a dry bottom, should be secured. At the same time, it should be understood that a more or less confined space is far preferable to an open shed, cellar, or outhouse, or any other situation of this kind that is in direct communication with the external atmosphere.

A cool northern aspect is the best that can be selected wherein to build a "mushroom-house," as the sun does not influence it so readily during the early spring months as it does one having a southern aspect. And it may be well to observe here, that excessive heat is antagonistic to mushroom culture.

When such a position as the above cannot be obtained, an aspect due west will be found the next best

for that purpose; as though it is possible to grow mushrooms, in a more or less confined space, by the aid of natural sun heat, they invariably become infested with a very objectionable grub, and consequently lose much of their freshness and desirable characteristic properties.

If the above simple conditions are secured, we do not attach primary importance to any special form of structure, though we intend to furnish details of a "mushroom-house," the form and interior arrangements of which approach nearer to the natural conditions than any other we have seen.

If it is intended that prolific, lasting, and paying beds are to be made, sufficient space should always be provided to admit of such a bulk of material being employed as will contain, when well beaten down, a moderate amount of heat, and such an amount of moisture as will ensure perfect protection from excessive dryness, without the necessity of a continual resort to superficial waterings.

It not unfrequently happens that an unreasonable depth, or thickness of materials, is made to do duty for the want of more extended space; and this, often, under the erroneous impression that the bed will, in consequence, be more prolific. The error, however, is not at all times without its compensatory advantages, as it often, unknown to the operator, insures some of the necessary conditions above enumerated.

Deep substances are anything but essential in mush-

room culture ; indeed, a moderate depth of material, of the proper sort, suits the thread-like spawn admirably, for it grows freely, and ramifies in it in great luxuriance. Besides, making deep beds causes an unnecessary outlay and waste of material, which is no small consideration in places where there is a scarcity of "droppings." Further than this, thick heavy beds are more liable to fluctuate greatly in regard to internal temperature, for when once they become over-heated, they are very liable to become excessively dry ; and, what is equally if not more injurious, unduly wet, as whether rapid decomposition sets in or not, some injury to the delicate spawn must accrue, and the returns will be very meagre in consequence.

We will now, for the benefit of intending cultivators, describe "our house," which is based upon natural principles.

It is a form of house which is very simple to construct, and one in which the interior arrangements are made so as to require only the least possible amount of labour in making the beds, compatible with efficiency in the necessary operations.

In the first place, we may observe that a thoroughly efficient drainage underneath is of very great importance ; next to which the floor within, not being either paved or bricked over, should be made as damp-proof as possible. This can be effected by the aid of a kind of concrete, consisting of a mixture of fine gravel, sand, and fresh slacked lime ; or, what is better suited

for the purpose, good chalk. After mixing these substances well together, and securing the necessary drainage, the mixture should be placed in layers to the required height, and be well rammed down, after which a thin layer of fine ashes should be spread over the whole surface, and be beaten down level.

In building the walls the same precaution should be taken to resist, as far as can be done, the action of damp, for this is of all things the most unfavourable to the object in view. The most efficient preventive consists in placing a good layer of black quarried slate, well bedded in mortar, immediately below the ground line. The wall should be built hollow from the slate upwards. The vacuum thus formed will not only prove of great assistance in keeping the internal temperature as uniform as possible, and in a great measure in preventing sudden fluctuations of all kinds, but will materially assist in economising heat.

The mean height of the structure within should not be less than eight feet. In width nine feet will be found amply sufficient to make the beds, as we shall shortly explain. Our house is thirty feet long, which added to the dimensions given above, forms a considerable space.

The roof we have is so constructed as to lie as flat as it can conveniently be made to do, in view of meeting the requirements of the case (without wasting materials), as we prefer having the ceiling, similar to the lower rooms of a house, as flat as possible, for the purpose of

equalising the heat throughout the interior. This is a point of considerable importance, in conjunction with the manner in which the house is heated.

In heating the house, instead of placing pipes or flues under the floor, or paths, or alongside the beds, we have simply placed a single four-inch pipe all around the wall, at about four and a half feet from the floor.

By this arrangement we have endeavoured to imitate nature in applying heat—as applied to the earth without, and the result has been, without a solitary exception, a complete success.

Having given some details of the form and dimensions of the “house,” we will now proceed to describe the arrangements in the interior. The beds are simply made upon the floor, and are divided off in equal proportions with the aid of thin slabs or planks of wood, these being supported and kept upright with three neat stakes, one at each end, on the one side, and the third in the centre on the opposite side, though this latter is not at all necessary when the beds are filled; the whole being, when completed, from twenty to twenty-four inches in height. The dimensions given above will allow of six separate beds being made in this way.

In commencing to make the beds, the materials may be wheeled on to the actual space where the bed is to be made, thereby saving much of the labour that is required in filling a house constructed after the old

style. The materials, loosely thrown down previous to making the bed, should not be more than two feet deep.

After the first bed is made, the next compartment should be used in like manner, and so on in rotation, as by these means each successive bed is made to replenish the waning heat of those made previously ; and it will be readily observed how timely and beneficially this will act, in keeping up a regular and uniform temperature, as well as a supply of latent moisture on the outer sides.

Under such favourable conditions as these, the spawn will quickly extend into each succeeding bed, finding its way between the hoardings that separate the beds one from another with great rapidity, so that in the end, when the whole of the space is filled up, mushrooms will crop up abundantly and regularly over the whole surface.

The mushrooms will not only be abundant, but of a uniformly large size, juicy, and substantial, when compared with those grown under more favourable circumstances in the open air.

In addition to what we have already stated respecting the primary considerations necessary to be observed in choosing a makeshift position on which to grow mushrooms, we may point out such places as dry cellars, spare places in stables, coach-houses, and warm, close outhouses of any description; and, in the summer-time, they may be grown on ridges formed in the open air.

In making these latter, it will be found a good plan to procure from three to a dozen faggots of wood, according to the length required, and to make them into a kind of temporary stage, in the following manner :— They should be placed two at the bottom, and one resting on the top, and the whole should be pressed firmly together. This will, when finished, make a good half-circular base upon which to build the materials.

This basis for the “mound-bed” is necessary to restrain any excess of heat that may arise, to keep the materials used dry during the earlier stages of the growth of the spawn, and to assist in retaining both artificial and latent heat, &c., &c.

In concluding these observations, we may observe that when the protection of a shed, or other similar place, is chosen, it should always be as warm and comfortable as possible during the winter season : to obtain this end, a warm, sunny aspect is the best. In the spring and summer months, a cool, north aspect, that is much shaded, should always be chosen.

By following this plan, it will be found that a uniform and average temperature will be secured, which admirably suits mushrooms when growing.

II.—DESCRIPTION OF MATERIALS SUITABLE FOR MUSHROOM GROWING.

WRITING in general terms, we may say that the “droppings” from most cattle will, with due attention, assist in the production of mushrooms. But, at the same time, it must be observed that the droppings produced by cattle fed upon dry provender should alone be secured, where they can be obtained, as they are greatly superior to those produced by animals that are fed upon any kind of green food.

Horse droppings, when they can be got, are preferable to all others. Cow-dung, collected in a dry state from pastures, is a great assistance to the former when broken up small and mixed with it in proportions of about one part of cow-dung to six or eight of horse droppings. The same remarks apply also to the dung produced by deer and sheep.

A small addition of short stable litter, or “sweepings,” should always be used, and be well mixed up with the former; this tends to bind the whole more firmly together, and resists the too quick decomposition of the coarse droppings, which takes place when they are used alone, and also produces a material that is better amalgamated.

The compost, with which the beds are to be finally surfaced over, should be the best of its kind that can be obtained, as much depends upon its quality in

the production of mushrooms. There is none better for this purpose than stiff, yellow loam, of moderate consistence; in fact, it should be sufficiently firm to bind well together when beaten down at the finish.

The surface spit, or paring of a green pasture—which as nearly as possible represents the above conditions—taken off and packed up in a heap for about six months, is generally the best material that can be used.

But we have reason to believe that loam from off a pasture that is contiguous to calcareous soils, or, indeed, calcareous soil of itself, tends to increase the productiveness of the beds.

When the proper materials are in a sufficiently advanced state of preparation to admit of the beds being made up, one part of loam of the above description, in a dry state, should be added to about six parts of droppings; the whole should then be thoroughly incorporated together.

III.—HOW TO PREPARE THE MATERIALS.

BEFORE we enter into a detailed account of the method of properly preparing the materials for making mushroom beds, which is the more important from

the fact that adverse circumstances rapidly multiply, it may be advisable for us to state and explain what is the most perfect condition for them to be in,—*i. e.*, what are the circumstances that combine together to ensure perfect success.

The materials, consisting of crude “droppings” with a small quantity of stable-sweepings, or litter, intermixed, should be made moderately dry, without resorting to the process of fermentation. They should be fresh and in their entirety, as they pass from the cattle, but dried in a sufficient degree to prevent the mass from excessive fermentation when closely confined in a limited space.

This is the simple reason why horse droppings are so highly prized, and especially those that are scraped up from roads during dry weather. These, with an admixture of road-drift and grit, are generally—during such periods—in a fit state to be transferred into beds immediately a sufficient quantity for that purpose is gathered together.

Equal to these are stable droppings and sweepings, wheeled out, during fine dry weather, into an open shed, or on to an open space, having a solid surface. If fowls are allowed to scratch well amongst the heaps immediately they are wheeled out, so much the better; as, by this means, a complete dissemination of the whole into the most minute particles will be effected, the process of drying will be materially forwarded, and no loss of producing power will be occasioned; indeed,

beds formed of such materials are surpassed by none.

Where time can be spared, and there is a sufficiency of room, it will amply repay the operator to pass the whole bulk through a coarse sieve during the drying process. The tendency which this method has to cause a more complete amalgamation when the beds are finally beaten down, will sufficiently explain the usefulness of the proceeding.

Thus far we have endeavoured to impress upon our readers that every possible means should be taken to neutralize the tendency to excessive fermentation, and to retain as much only in that state as may be actually necessary to insure a permanent minimum degree of heat, for the proper encouragement of the growth and producing capabilities of the spawn when the bed is finally made.

The spawn, during the process of growth, has a decided aversion to decayed, rotten materials, or to any other substances that are in a state of decomposition. It appears at all times to attach itself to the dry portions only; and we repeat that spawn will not grow, thrive, or prosper in decomposed or rotten materials.

Thus far having endeavoured to convey, in plain language, the true principles upon which the artificial production of mushrooms hangs, we will now explain how the materials should be practically dealt with under adverse circumstances; not the least of which

arises from the fact that droppings produced by cattle fed exclusively upon dry food are only attainable in quantity during the damp winter months; hence they are generally in a more or less wet, sloppy state. The labour in drying them during such a season is much increased, and every advantage should, in consequence, be taken of opportunities of securing and placing them in any open shed, or other similar position, where they can be effectually sheltered from superficial rains.

In such a place, whilst the process of collecting is going on, every portion should be spread loosely over the floor, in moderate sized ridges, or in any other manner that will allow the air to get amongst it to assist in drying.

They should also be tossed over or turned, and lightened up daily for the same purpose, until a sufficiency is gathered together for immediate use.

We may here state for the benefit of intending amateur cultivators, that at least from eight to ten good barrow-loads should be obtained; any further quantity being unnecessary, unless it can be turned to good account in making more or larger beds, as means will permit.

In any case, when the materials come to hand in a wet state, rather more litter or dry sweepings should be added, and if possible this litter should consist of wheaten straw in preference to all others that are of a softer texture and are more liable to decay.

When the mass has fairly commenced heating, a

moderate layer of dry litter should be spread over its surface. This will draw off and absorb all excessive moisture as it emanates from the inner mass during the process of condensation.

When, from the above cause, the surface litter becomes wet it should be removed, the heap should again be well turned over, bringing the inner portion to the outside, and transferring the outer portion to the interior. Fermentation should again be encouraged, by placing another layer of dry litter as before, or, in other words, by repeating the process. Two applications of this character will, as a rule, generally suffice as a preparation of materials previous to making the beds. But should the matter be still too damp the same process should be repeated for a third time, and even a fourth if necessary.

When the materials are in a fit state for use they should smell somewhat sweet, and appear dry as before stated, sufficient moisture only being left in to ensure a temperature of about 130° , when they are again turned over and placed where the bed is to be made.

The dry loam, cow-dung, &c., previously alluded to, should be added at this stage, either by throwing them loosely upon the heap, or by placing them in successive layers with the droppings; and then turning the whole over with the view of equally distributing and thoroughly incorporating the mass

IV.—HOW TO MAKE MUSHROOM BEDS.

BEFORE “making up” a mushroom bed, regard should be had to the following considerations. First, as to the thickness that will be necessary to ensure a prolific and durable bed. And, secondly, as to the quantity of materials in a loose or open condition that will be required to ensure such a thickness.

The former will vary according to the position in which the bed is to be made; but, if it is made upon shelves in an old bin, or in close proximity to hot-water pipes, or flues, it should not be less than from eighteen inches to two feet in thickness, when well beaten down.

Should the “beds,” however, be formed on the floor of a cellar or shed, or in any other similar situation, and more especially if made up in such a mushroom house as the one we have described, a thickness of about one foot will be ample to secure the requirements of the case. In fact, the more moderate in size the beds are made, the better; and there will be less risk to contend against of too frequent and uncertain fluctuations of temperature, than with large beds, and especially in the hands of amateurs and of others whose experience in these matters is not very great. Moreover, in small beds the matter is not so liable to get too wet, as whether the spawn is in active growth, or otherwise, few things are more destruc-

tive or detrimental to its well-being than excessive damp.

Assuming that the position and space are fixed upon, and the materials are at hand, the first thing to be done is to form a basis on which the future bed is to rest, by placing a moderate layer of coarse, sweet litter, evenly over the bottom.

The materials should then be tossed lightly and evenly over this layer, until it attains to rather more than double the thickness it is required to be when finally finished off. It should be pressed down with the feet uniformly "once round," and allowed to remain so until it has again become fairly heated.

In this condition it should be induced to heat to as high a degree as it is capable of doing. When this is attained, and the temperature has declined to about 140°, the bed should be firmly beaten down forthwith.

This is best performed by first treading it well down all around with the feet, if the position of the bed will allow of this being done. Careful attention should be given to the outsides, so that none becomes detached, and that the whole of the space is filled in as firmly and solidly as the constituent parts of the materials will admit of.

Then proceed to ram the whole surface down vigorously, with a heavy flat-bottomed rammer, until no further impression can be made upon it; leaving it as before to recover a little heat.

Should the heat, now nearly beaten out, be somewhat

slow in re-developing itself, mats, or some other suitable materials should be laid over the beds to assist in raising the temperature. Where artificial heat can be applied, resort should be had to it for the same purpose.

When a somewhat stationary temperature, averaging from 85° to 90° , has been gained, proceed to make holes in the surface of the beds with a thick, blunt dibble. They should be about two inches deep and from four to six inches apart, and if, in their arrangement, they are placed in a quincunx fashion, so much the better.

Again, it will be found advisable to leave the bed for a night or two, to ascertain definitely its range of temperature, and should it rise above a mean of 90° it should be left until it falls to the temperature above indicated.

Immediately the bed is beaten down, a number of "spawn-bricks," according to the size of the bed, should be obtained, and these should be placed in tepid water for the space of four or five minutes. After taking them out of the water they should be laid loosely upon the surface of the bed until the required temperature is secured for "spawning;" they should then be broken, as uniformly as possible, into pieces about the size of medlars, placing one piece so broken off into each of the previously prepared holes: each piece should be pressed down as firmly as possible without breaking it, and at the same time the materials should be drawn firmly around it.

We may here observe, that when placing the materials

upon the allotted space, we always pick out three or four dozen entire "horse-droppings," that is, such as are thoroughly dry and fresh; we place these one at the bottom of every hole as above, and press one firmly upon every piece of spawn after it is inserted. It is often only by paying attention to such trifles as these that great success can be attained, hence we have thought that this simple fact was not unworthy of notice.

The bed, after having been again firmly trodden over, will then be ready for "soiling"—as the operation is generally termed in garden phraseology. We have already stated what is the best soil for this purpose, and we need only further remark on this subject that the soil, of whatever description it may be, should be tolerably dry.

Place it nicely and evenly over the bed, and if this is required to produce mushrooms quickly, say in six weeks, from three quarters to one inch in thickness will suffice. If there is no particular necessity for haste, and a longer space of time, one, or even two weeks more, can be given, more soil should be placed on the bed to a thickness of about two inches or two inches and a half. The soil should be again trodden firmly down and beaten over with the before mentioned rammer, and then patted well down with the back of a bright spade. While performing this last operation the surface should be sprinkled all over with water, and there should be a pail or water-can of clear water at

hand wherein to dip the spade occasionally, and thus to give the bed the final "pat" over; this will cause the whole surface to amalgamate and set firmly together as one mass.

Then by placing a "test-stick" in the centre of the bed to ascertain how the heat stands within, the actual operation will be completed.

Some attention will still have to be given in regard to maintaining as even and as regular a temperature as possible; this should not by any means be allowed to exceed a mean of 85° , or fall below 55° : the nearer and more uniformly the heat averages from 65° to 70° the better: we, however, give the two limits as a general rule, as individual beds will sometimes indicate very strong and sudden fluctuations of temperature.

When mushroom beds are made in the open ground, or other similar situations, it will only be necessary to follow the instructions given above, and to act within the limits described, as being applicable to more favourable situations.

We will here take the opportunity of making a few observations respecting the manner in which by far too many practitioners test the heat of the materials they are making into beds, *i.e.*, by the aid of the hands alone.

We would particularly impress upon our readers how fallacious and variable this sort of test is, even with those who are accustomed to it, and make a practice of applying it.

It must be remembered that the warmth of individual hands varies exceedingly, and that the hands of the same person are not always of the same uniform temperature. And, moreover, while applying the test, many forget to take the warmth of their hand into consideration at all. The stick (or the body of the mass itself) might feel very warm and comfortable to the hand, and from this it would be inferred that "spawning" could be done safely ; but if the temperature of the hand were calculated in addition to the much greater heat of the materials, instead of having the requisite mean of 80° or 85° , it would often be found to reach to a mean of from 120° to 140° .

We assert our belief that more good beds are wanting in fertility on account of this easily avoided error than from any other known cause.

If the materials are such as we have endeavoured to explain they should be, in the case of the temperature exceeding 55° only by a few degrees at the time of spawning, they will not fail in eventually producing a crop. But if there should be an excess of heat, the spawn itself will be destroyed, and with it all chances of attaining these desirable results.

V.—WHAT ADDITIONAL ATTENTION THE BEDS REQUIRE.

FROM the time when the beds are spawned until the mushrooms begin to “show,” the only attention which they require is to keep them dry, warm, and snug.

Mushroom spawn, as we have before said, in whatever situation it may be, only succeeds thoroughly where the position and materials combined are dry.

It is advisable immediately the mushrooms begin to push, or at the expiration of the time above alluded to, to sprinkle the beds slightly over with tepid water, to assist in a great measure in preventing the beds from cracking; which they will do, in most cases, where strong fire-heat is applied to raise the waning latent heat at this period. A mat, or some other similar substance, placed upon the bed, tends to retain the even surface in this respect, and does not unduly neutralize the usefulness of the artificial heat which is applied.

We should state here that we have a decided objection to the use of hay—or such-like litter—in any form, for the purpose of covering beds made in structures to which artificial heat can be applied. It tends to neutralize, to too great a degree, the beneficial influences of the fresh air that may be admitted into the mushroom-house; to say nothing of the dis-

advantages attending the process of watering, which cannot be done half so often as it should be in consequence of evaporation being somewhat slow; and this in its turn has a very unwholesome effect upon the surface of the bed—far different from that which is best suited to the growth and production of mushrooms. At the same time, it must be remembered that a quantity of these is also destroyed by rolling or otherwise taking off the materials when searching for the “buttons.”

With “mound beds” situated in the open air, the case is not strictly analogous, as there protection of some kind is wanted, on the one hand to guard against the excessive moisture caused by superficial rains, and on the other against the undue evaporation caused by hot, dry weather, which changes frequently alternate even during our most favourable summers.

When once the crop commences to fairly show above ground, a moderate soaking should be given to the whole bed. This should at all times be done with water a few degrees higher than the temperature of the house itself; and if a nice warm degree of artificial heat can be afforded at the same time, it will prove an additional incentive to luxuriant growth.

From this time the bed may be considered as in “full bearing,” and in structures to which artificial heat is applied, the beds should be sprinkled over with a fine syringe every evening; but where assistance of this kind is wanting, about twice a week is amply sufficient.

Take care in the operation of watering, or damping, that the beds are not made too wet.

A good soaking will not be required, more than once, during a period of three weeks or a month, if the beds are made upon such a cool bottom as has been suggested. In cases where they are made so near to the heating media as to cause them to dry quickly, thorough waterings will, as a matter of course, be oftener required. How often they should be applied cannot definitely be determined without a knowledge of all the circumstances of the case. We may again remind our readers that the beds should not be allowed to become too dry at any time after they commence bearing.

Most mushroom beds are apt to yield successional crops, and a few will also sprout up at intervals between the main growths, and demand some notice. As a rule, a nice watering should be given after each bearing has been secured; and if, after two good crops have been obtained in this way, a little clear liquid manure, to which are added two ounces of salt to every gallon, is applied, it will materially revive the declining fertility of the beds.

Mushrooms, it is well known, have the power of reproduction by spores, as most other plants have by seeds; hence we may here remark, that they should always be gathered, at the latest, as soon as they are full grown.

Their whole growth being quick, it is natural to infer that, by leaving them in the bed a day or two

beyond their perfected state, the spawn is considerably weakened.

In gathering them we always prefer twisting them off bodily, with the footstalk attached. Some persons prefer cutting them off, and are very particular to leave the base of the stalks remaining in the beds, a practice not really so profitable as it is supposed to be.

A mistaken idea exists amongst mushroom cultivators respecting the admittance of light into the structures in which they are grown, and it is often stated that "they grow only in the dark." But if darkness does cause actual enlargement in process of growth, it must be borne in mind that light, and light only, is capable of enabling them to attain to their full development.

We say, then, allow regular access of light with air, as constantly as possible, without causing too great an irregularity in the temperature. In fact, at all times imitate nature, "out-of-doors," as much as possible, except so far as it is desirable, on account of adverse circumstances, to rely on artificial means alone.

With regard to the necessary temperature, a bed that is in bearing should be kept at a mean of between 55° and 60° . A higher range of temperature will produce mushrooms quicker, but it greatly impairs their form. A moderate degree of heat, with light and air as before stated, will produce sturdy, well-developed specimens, and will also tend to make the beds lasting and productive.

VI.—CONCERNING MUSHROOM SPAWN.

“SPAWN-BRICKS” are generally made with materials similar to those recommended for making the beds at p. 14, with this exception, that all the long litter is shaken out, and rather more loam and cow-dung are used. The whole, when properly sweetened, is moistened, so as to cause it to cohere readily throughout. It is then made into bricks by placing it, in this state, into a mould of the required size, and beating it firmly together. A little is then scooped out from one of the flat sides, to admit of eventually putting a small portion of old spawn in, and then the bricks are placed in a position where they will dry quickly.

When they become tolerably dry the bricks are chosen and paired, and a small piece of the old spawn is deposited in the places previously made for its reception between them.

They are then packed away in dry places, where they are covered with well-sweetened fermenting materials, in sufficient quantity to insure a regular temperature of about 65°.

Here the small pieces of spawn thrive, and extend themselves throughout the whole mass. The bricks being thoroughly permeated by the white thread-like formation, are then removed immediately, and are placed in such a position that they may dry perfectly and quickly.

The spawn sold in the trade under the name of "milltrack" sufficiently explains its origin by its name. "Spawn-bricks" can be obtained from most nurserymen at 6*d.* each, and at from 4*s.* 6*d.* to 6*s.* per bushel.

Of these there are two distinct sizes made. Those of the large size, which are generally very good, average twelve to the bushel, and the smaller size fourteen, and in some instances sixteen.

Mushroom spawn should never be permitted to become wet, nor should it be kept in too damp a situation. Moderate exclusion of light and air is also of some importance in retarding its growth, and in keeping it in a nice fresh condition.

VII.—TO PRESERVE MUSHROOMS.

IN conclusion, a few remarks upon keeping mushrooms when gathered may be acceptable to some of our readers.

If the "buttons" are gathered in a young state, they should be kept as much as possible in their entirety, and should not be severed from the stalks, or otherwise bruised. But if rather old, and the stalks have become somewhat dry, it is best to remove them by cutting them off near the films.

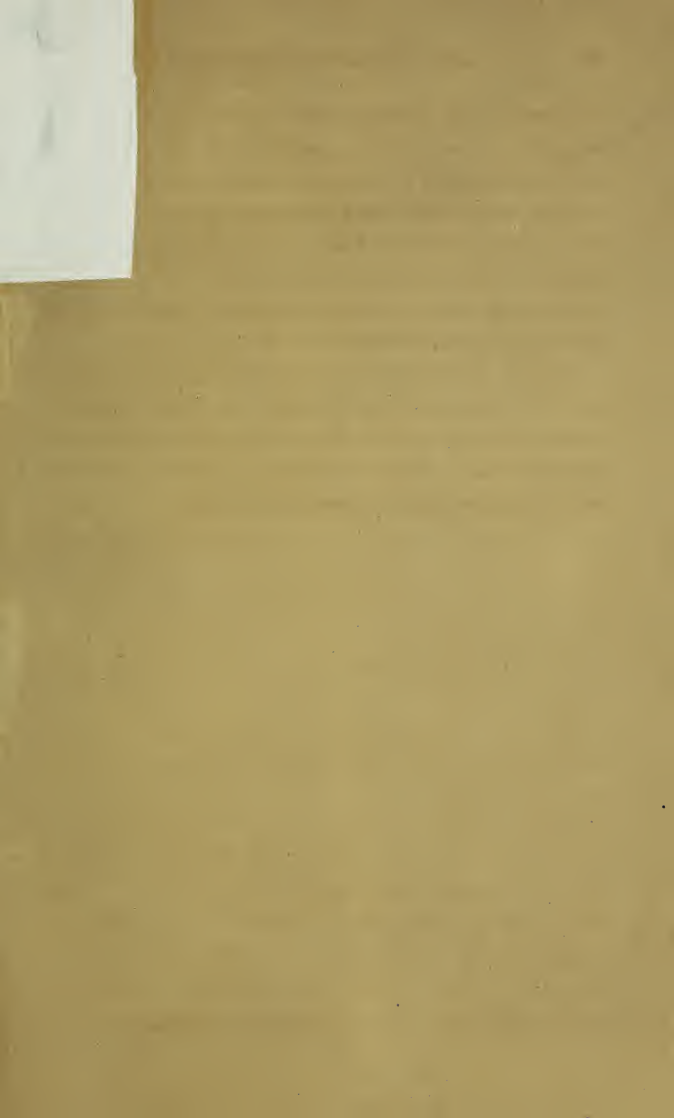
When gathered they should be removed as quickly

as possible, and placed under a cover of any kind, so that the air is excluded as much as is practicable. This will confine, to a certain extent, the evaporation that is continually being given off by mushrooms, as will readily be seen by an examination of the inner surface of the cover placed over them.

By these means their freshness and flavour will be retained for a considerable period.

In packing mushrooms for transmission to a distance, it will be found an excellent plan to place a layer of fresh, soft, and moderately moist leaves between and amongst them. They will thus keep fresh, and travel well for a considerable time and distance.

THE END.



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